Russian Physics Journal 2017, pages 1-8

Phenomenological Model of Multiphase Cosmological Scenario in Theory of Induced Gravity

Zaripov F.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2017 Springer Science+Business Media New YorkEquations that describe the theory have solutions that can both match with the solutions of the standard theory of gravity as well as can differ from it. This is due to the fact that the fundamental constants of the theory, such as gravitational and cosmological, can evolve over time and also depend on the coordinates. Thus, in a rather general case the theory describes the two systems (stages): Einstein and evolving. This process is similar to the phenomenon of phase transition, where different phases (Einstein gravity system, but with different constants) transit into each other. This article is a continuation of the author research with application to the cosmological model.

http://dx.doi.org/10.1007/s11182-017-0983-0

Keywords

cosmological models, gravitation